**Knowledge Transfer Centre De Marke**

Accurate nutrient management is a prerequisite for further development of dairy farming, particularly in the Netherlands. The amount of milk that can be produced will increasingly be defined by the extent to which farmers succeed to limit nutrient losses. On KTC De Marke innovative measures are designed and tested to minimize nutrient losses while exploring the technical limits of efficient nutrient management. Our research is conducted by Wageningen UR Livestock Research and Plant Research International, both part of Wageningen UR.

Site characteristics

* Soil: light sandy soil
* Precipitation surplus: 300 mm/yr
* Organic matter content: 4.5%

Farm characteristics

* Total area: 55 ha
* Permanent grassland: 11 ha
* Grassland and pasture: 33 ha
* Arable crops: 22 ha
* Crop rotation: grass-clover – maize: 44 ha
* Catch crop in maize: Italian rye grass (under-sow)
* Milking cows: 85
* Young stock: 6/10 milking cows
* Milk production per cow: 8,500 kg/year
* Production intensity: 13,000 kg milk/ha
* Grazing period: April - September
* Grazing hours per day: 6

Special equipment

* Automated milking system
* Manure (slurry) fermentation
* Bio-gas delivery to national gas distribution system
* (fermented) Slurry separation (into liquid and solid fractions)
* Manure refinery